

REMARKS

This application has been carefully reviewed in light of the Office Action dated September 13, 2000. Claims 2, 3, 5, 7, 9, 11, 12, 14, 16, 18, 22 to 25, 27, 28, 30 to 33, 35, 36, 39 to 41, 43, 45 to 47, 49 and 55 to 76 are in the application. Claims 55 to 71, 73 and 75 are the independent claims. Reconsideration and further examination are respectfully requested.

Claims 3, 5, 12, 14, 55, 57, 59 and 67 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,740,368 (Villalpando); Claims 27, 28, 35, 36, 61 to 63 and 69 were rejected under § 103(a) over Villalpando in view of U.S. Patent No. 5,700,003 (Sung); Claims 2, 7, 9, 11, 16, 18, 56, 58, 60 and 68 were rejected under § 103(a) over Villalpando in view of U.S. Patent 5,791,790 (Bender); Claims 22 to 25 and 30 to 33 were rejected under § 103(a) over Villalpando in view of Sung and further in view of U.S. Patent No. 5,859,956 (Sugiyama); Claims 39 to 41, 43, 45 to 47, 49, 64 to 66 and 70 were rejected under § 103(a) over U.S. Patent No. 5,812,745 (Kim) in view of Sugiyama; and Claims 71 to 76 were rejected under § 102(e) over Villalpando in view of U.S. Patent No. 5,740,513 (Matsuo). Applicants have carefully considered the Examiner's remarks and the cited references and respectfully submit that the claims herein are patentably distinguishable over the cited art for at least the following reasons.

The present invention concerns communication with a

printing unit regarding changes in conditions of the printing unit. In particular, when a signal is received from a printing unit indicating that a condition of the printing unit has changed, the condition of the printing unit is acquired. According to one aspect of the present invention, when it is determined, based on the acquired condition, that the condition of the printing unit corresponds to a power-OFF notice, an external apparatus is informed that a power supply is scheduled to be turned off.

With reference to claim language, Claims 55, 57, 59 and 67 concern receiving a signal from a printing unit indicating that a condition of the printing unit has changed, acquiring the condition of the printing unit in response to the signal, and determining based on the acquired condition whether the condition of the printing unit corresponds to a power-OFF notice. When it is determined that the condition of the printing unit corresponds to the power-OFF notice, an external apparatus is informed that a power supply is scheduled to be turned off.

The applied art of record is not seen to disclose the foregoing features of the claimed invention. In particular, the applied art is not seen to disclose at least the features of receiving a signal indicating that a condition of a printing unit has changed, acquiring the condition of the printing unit in response to the signal, and informing an external apparatus that a power supply is scheduled to be turned off when it is determined that the condition of the printing unit corresponds to a power-OFF notice.

Specifically, Villalpando concerns the management of peripheral devices, such as a printer, connected through a network to processing modules. Villalpando teaches that a device controller 220 detects and transfers printer status information to a device interface 209. However, as Applicants see it, Villalpando fails to disclose that it is in response to a signal indicating that a condition of a printing unit has changed that the condition of the printing unit is acquired.

The Office Action argues that the device controller 220 receives a signal indicating that a condition of a print engine 224 has changed and acquires the condition of the printing unit in response to the signal. However, Villalpando is not specific in describing the communications involving the device controller 220. In particular, Villalpando is not seen to disclose the device controller 220 receiving a signal indicating that a condition of a printing unit has changed. Villalpando is also not seen to disclose the device controller 220 acquiring the condition of the printing unit in response to receiving a signal. Rather, Villalpando merely discloses the device controller 220 receiving status information from the print engine 224 without any specificity as to a trigger event for receipt of such status. Accordingly, Villalpando is not seen to disclose the features of receiving a signal indicating that a condition of a printing unit has changed and acquiring the condition of the printing unit in response to the signal.

Additionally, Villalpando is not seen to disclose informing an external apparatus that a power supply is scheduled to be turned off when it is determined that the condition of the printing unit corresponds to a power-OFF notice. While Villalpando teaches the transfer of a status signal indicating "please power off," the transfer of this status signal is not seen to be anticipatory of informing an external apparatus that a power supply is scheduled to be turned off. Therefore, Villalpando is not seen to disclose informing an external apparatus that a power supply is scheduled to be turned off.

Accordingly, Claims 55, 57, 59 and 67 are believed to be patentable over the applied art. Reconsideration and withdrawal of the § 102(e) rejection of Claims 55, 57, 59 and 67 are therefore respectfully requested.

According to another aspect of the present invention, when it is determined, based on the acquired condition, that the condition of the printing unit corresponds to a power-OFF notice, information on a print job that has not been completed is stored in a nonvolatile storage medium. When a power supply is turned on, information on the print job that has not been completed is supplied to an external apparatus.

With reference to claim language, Claims 56, 58, 60 and 68 concern receiving from a printing unit a signal indicating that a condition of the printing unit has changed, acquiring the condition of the printing unit in response to the signal, and determining based on the acquired condition whether the condition of the printing unit corresponds to a power-OFF notice. When it

is determined that the condition of the printing unit corresponds to the power-OFF notice, information on a print job that has not been completed is stored in a nonvolatile storage medium. When a power supply is turned on, information on the print job that has not been completed is supplied to an external apparatus on the basis of the information stored in the nonvolatile storage medium.

The applied art of record is not understood to disclose or suggest the foregoing features of the claimed invention. In particular, the applied art is not understood to disclose or suggest at least the features of receiving a signal indicating that a condition of a printing unit has changed, acquiring the condition of the printing unit in response to the signal, storing information on a print job that has not been completed in a nonvolatile storage medium when it is determined that the condition of the printing unit corresponds to a power-OFF notice, and supplying information on the print job that has not been completed to an external apparatus when a power supply is turned on.

Villalpando, for example, is not seen to disclose or suggest the features of receiving a signal indicating that a condition of a printing unit has changed and acquiring the condition of the printing unit in response to the signal. Additionally, Villalpando is not seen to disclose or even suggest the features of storing information on a print job that has not been completed in a nonvolatile storage medium when it is determined that the condition of the printing unit corresponds to

a power-OFF notice, and of supplying information on the print job that has not been completed to an external apparatus when a power supply is turned on.

Bender is not understood to disclose anything that would remedy the foregoing deficiencies of Villalpando. Bender concerns a printing system in which print jobs received by a printer are buffered by storing them on a hard disk. However, Bender does not disclose or even suggest the feature of receiving a signal indicating that a condition of a printing unit has changed, or the feature of acquiring the condition of the printing unit in response to the signal.

The Office Action states that Bender teaches supplying information on a print job that has not been completed to an external apparatus when the power supply is turned on. Applicants respectfully disagree with this conclusion. Bender teaches that a message indicating that print jobs are stored on a hard disk is sent to the printer's panel display and to all host computers running specific software. See column 4, lines 37 to 44. However this message is a general statement that print jobs exist on the hard disk and not information on the specific print jobs stored thereon. Therefore, Bender does not disclose or even suggest the feature of supplying information on a print job that has not been completed to an external apparatus when the power supply is turned on.

Accordingly, Claims 56, 58, 60 and 68 are believed to be allowable over the applied art. Reconsideration and withdrawal of the § 103(a) rejection of Claims 56, 58, 60 and 68 are therefore respectfully requested.

According to another aspect of the present invention, when it is determined that a change in condition corresponds to a change in remaining paper quantity, an external apparatus is informed of the remaining paper quantity.

With reference to claim language, Claims 61, 62, 63 and 69 concern receiving from a printing unit a signal indicating that a condition of the printing unit has changed, acquiring the condition of the printing unit in response to the signal, and determining based on the acquired condition whether a change in condition corresponds to a change in remaining paper quantity. When it is determined that the change in the condition corresponds to a change in the remaining paper quantity, an external apparatus is informed of the remaining paper quantity.

The applied art of record is not understood to disclose or suggest the foregoing features of the claimed invention. In particular, the applied art is not understood to disclose or suggest at least the features of receiving a signal indicating that a condition of a printing unit has changed, acquiring the condition of the printing unit in response to the signal, and informing an external apparatus of the remaining paper quantity when it is determined that the change in condition corresponds to a change in the remaining paper quantity.

Villalpando, for example, is not seen to disclose or suggest the features of receiving a signal indicating that a condition of a printing unit has changed and acquiring the condition of the printing unit in response to the signal. Additionally, Villalpando is not seen to disclose or even suggest the feature of informing an external apparatus of the remaining paper quantity when it is determined that the change in condition corresponds to a change in the remaining paper quantity.

Sung is not understood to disclose anything that would remedy the foregoing deficiencies of Villalpando. Sung concerns a sensing device used for sensing and displaying an amount of paper sheets. However, Sung is not understood to disclose or even suggest the feature of receiving a signal indicating that a condition of a printing unit has changed or the feature of acquiring the condition of the printing unit in response to the signal.

Accordingly, Claims 61, 62, 63 and 69 are believed to be allowable over the applied art. Reconsideration and withdrawal of the § 103(a) rejection of Claims 61, 62, 63 and 69 are respectfully requested.

According to another aspect of the present invention, information indicating a condition change designated in a plurality of condition changes and host apparatus is stored in a storage medium. When it is determined that one of the condition changes indicated by the information stored in the storage medium has occurred, the host apparatus indicated by the stored information is informed of the condition of the printing unit.

With reference to claim language, Claims 64, 65, 66 and 70 concern storing information indicating a condition change designated in a plurality of condition changes and a host apparatus in a storage medium. Upon receiving from the printing unit a signal indicating that a condition of the printing unit has changed, it is determined, in response to the signal, whether the condition change indicated by the information stored in the storage medium has occurred. The host apparatus indicated by the information stored in the storage medium is informed of the condition of the printing unit when it is determined that the condition change indicated by the information stored in the storage medium has occurred.

The applied art is not understood to disclose or suggest the foregoing features of the present invention. In particular, the applied art is not understood to disclose or suggest at least the features of storing information indicating a condition change designated in a plurality of condition changes and a host apparatus in a storage medium and informing the host apparatus indicated by the information stored in the storage medium of the condition of the printing unit when it is determined that the condition change indicated by the stored information has occurred.

Specifically, Kim concerns an image processing apparatus in which a video controller determines the state of a print engine according to engine states stored in a memory and either accepts or rejects print data from a computer according to the determined state. However, Kim is not understood to disclose

storing a host apparatus in the memory with the stored engine states. Additionally, the computer in Kim is not informed of the current state of the print engine when the video controller determines that one of the engine states stored in the memory exists. Accordingly, Kim is not understood to disclose or even suggest the features of storing information indicating a condition change designated in a plurality of condition changes and a host apparatus in a storage medium and informing the host apparatus indicated by the information stored in the storage medium of the condition of the printing unit when it is determined that the condition change indicated by the stored information has occurred.

Sugiyama is not understood to disclose or suggest anything to remedy the foregoing deficiencies of Kim. Specifically, Sugiyama concerns a data processing apparatus in which when an error occurs, processing procedures are performed according to an error processing table. However, the error processing table is not understood to store information indicating a condition change along with a host apparatus. Therefore, Sugiyama is not understood to disclose or even suggest storing information indicating a condition change designated in a plurality of condition changes and a host apparatus in a storage medium. Additionally, Sugiyama is not understood to disclose or even suggest informing a host apparatus indicated in stored information of the condition of a printing unit when it is determined that a condition change has occurred.

Accordingly, Claims 64, 65, 66 and 70 are believed to be allowable over the applied art. Reconsideration and withdrawal of the § 103(a) rejection of Claims 64, 65, 66 and 70 are respectfully requested.

According to another aspect of the present invention, after a power switch is turned off, electric power continues to be supplied to a printing apparatus for a predetermined period and during that period a host apparatus is informed that the power supply is to be turned off.

With reference to claim language, Claims 71, 73 and 75 concern a printing apparatus in which an electric power supply is controlled to continue to supply electric power for a predetermined period after a power switch is turned off. A host apparatus is informed in the predetermined period after the switch is turned off that the electric power supply is to be turned off.

The Office Action states that Claims 71 to 76 were rejected under § 102(e) over Villalpando in view of Matsuo. Applicants believe that this is an improper rejection since two patents are being used in a rejection under § 102. Accordingly, withdrawal of the § 102(e) rejection of Claims 71 to 76 is respectfully requested.

Even if the rejection were proper, the applied art of record is not understood to disclose or suggest the foregoing features of the present invention. Neither Villalpando nor Matsou is understood to disclose or suggest the feature of informing a host apparatus in a predetermined period after the

power switch is turned off that the electric power supply is to be turned off. While Villalpando teaches the transfer of a status signal indicating "please power off," the transfer of this status signal is not seen to be the equivalent of informing a host apparatus that a power supply is scheduled to be turned off. Therefore, Villalpando is not seen to disclose informing a host apparatus in the predetermined period after the power switch is turned off that a power supply is to be turned off.

Matsuo is not understood to disclose or suggest anything to remedy the foregoing deficiency of Villalpando. Specifically, Matsuo discloses a power switch that continues to supply power to an image formation apparatus for a predetermined period of time after the switch has been turned off, during which time a CPU can perform processes. However, Matsuo is not understood to disclose or even suggest the feature of informing a host apparatus in the predetermined period after the power switch is turned off that a power supply is to be turned off.

Accordingly, Claims 71, 73 and 75 are believed to be patentable over the applied art. Reconsideration and withdrawal of the rejection of Claims 71, 73 and 75 are therefore respectfully requested.

The other claims in this application are each dependent from the independent claims discussed above and are therefore believed to be patentable for at least the same reasons. Because each dependent claim is also deemed to define an additional aspect of the invention, however, the individual

consideration of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, the entire application is believed to be in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience.

Applicants' undersigned attorney may be reached in our Costa Mesa, California office by telephone at (714) 540-8700. All correspondence should be directed to our address given below.

Respectfully submitted,


Attorney for Applicants

Registration No. 32,622

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York, 10112-3801
Facsimile: (212) 218-2200



Application No.: 09/909,966
Attorney Docket No.: 862.1922

VERSION WITH MARKINGS TO SHOW CHANGES MADE TO CLAIMS

3. (Twice Amended) The apparatus according to claim 55, wherein the [host] external apparatus is [connected] informed via a communication network, and said informing means informs all [host] external apparatuses connected via the communication network.

5. (Twice Amended) The apparatus according to claim 55, wherein said determination means determines whether [the contents indicate a power-OFF notice signal based on] contents of the condition [required] acquired by said condition acquisition means indicate a power-OFF notice signal.

7. (Twice Amended) The apparatus according to claim 56, wherein [plural host] the external apparatus[es] [are connected] is informed via a communication network, and said informing means informs all [host] external apparatuses connected via the communication network.

9. (Three Times Amended) The apparatus according to claim 56, wherein said determination means determines whether [the contents indicate a power-OFF notice signal based on] contents of the [new] condition acquired by said condition acquisition means indicate a power-OFF notice signal.

12. (Twice Amended) The method according to claim 57, wherein [plural host] the external apparatus[es] [are connected] is informed via a communication network, and the informing step includes a step of informing all [host] external apparatuses connected via the communication network.

16. (Twice Amended) The method according to claim 58, wherein [plural host] the external apparatus[es] [are connected] is informed via a communication network, and the informing step includes the step of informing all [host] external apparatuses connected via the communication network.

22. (Twice Amended) The apparatus according to claim 61, wherein the external apparatus is informed of the remaining paper quantity via a communication network, and said informing means informs all [host apparatus] external apparatuses connected via the communication network of the remaining paper quantity.

23. (Twice Amended) The apparatus according to claim 61, further comprising registration means for registering print jobs, processing of which has not been completed yet, and wherein said informing means informs [host] external apparatuses as transmission sources of the print jobs registered in said registration means of the change in remaining paper quantity.

24. (Twice Amended) The apparatus according to claim 61, further comprising registration means for registering print jobs, processing of which has not been completed yet, and wherein said informing means informs [a host] an external apparatus as a transmission source of the print job corresponding to data which is being printed among the print jobs registered in said registration means of the remaining paper quantity.

25. (Twice Amended) The apparatus according to claim 61, further comprising registration means for registering print jobs, processing of which has not been completed yet, and designation means for designating a destination of said informing means, and wherein said informing means informs, in accordance with the designation by said designation means, all [host] external apparatuses connected, [host] external apparatuses as transmission sources of the print jobs registered in said registration means, or [a host] an external apparatus as a transmission source of the print job corresponding to data which is being printed among the print jobs registered in said registration means, of the remaining paper quantity.

27. (Amended) The apparatus according to claim 61, wherein said determination means determines whether contents of the change in condition acquired by said condition acquisition means correspond to [the] a change in remaining paper quantity.

28. (Twice Amended) The apparatus according to claim 61, wherein when said determination means determines that the change in condition corresponds to [the] a change in remaining paper quantity, said determination means also determines an actual remaining paper quantity, and said informing means informs the [host] external apparatus of the actual remaining paper quantity.

30. (Twice Amended) The method according to claim 62, wherein the external apparatus is informed of the remaining paper quantity via a communication network, and the informing step includes a step of informing all [host apparatus] external apparatuses connected via the communication network of the remaining paper quantity.

31. (Twice Amended) The method according to claim 62, further comprising a registration step of registering print jobs, processing of which has not been completed yet, and wherein the informing step includes a step of informing [host] external apparatuses as transmission sources of the print jobs registered in the registration step of the change in the remaining paper quantity.

32. (Twice Amended) The method according to claim 62, further comprising a registration step of registering print jobs, processing of which has not been completed yet, and wherein the

informing step includes a step of informing [a host] an external apparatus as a transmission source of the print job corresponding to data which is being printed among the print jobs registered in the registration step of the remaining paper quantity.

33. (Twice Amended) The method according to claim 62, further comprising a registration step of registering print jobs, processing of which has not been completed yet, and the designation step of designating a destination in the informing step, and wherein the informing step includes a step of informing, in accordance with the designation in the designation step, all [host] external apparatuses connected, [host] external apparatuses as transmission sources of the print jobs registered in the registration step, or [a host] an external apparatus as a transmission source of the print job corresponding to data which is being printed among the print jobs registered in the registration step, of the remaining paper quantity.

35. (Amended) The method according to claim 62, wherein the determination step includes a step of determining based on the contents of the condition acquired in the determination step whether the contents of the change in condition correspond to [the] a change in remaining paper quantity.

36. (Twice Amended) The method according to claim 62, wherein the determination step includes a step of determining an actual remaining paper quantity when it is determined in the determination step that the change in condition corresponds to [the] a change in remaining paper quantity, and the informing step includes a step of informing the [host] external apparatus of the actual remaining paper quantity.

39. (Twice Amended) The apparatus according to claim 64, wherein said storage means stores the information indicating a condition change [items] in units of types of host apparatuses, said determination means refers to the information indicating a condition change [items] stored in said storage means in units of types of host apparatuses, and said informing means informs the host apparatus of the condition change in units of types of host apparatuses.

40. (Twice Amended) The apparatus according to claim 64, further comprising additional reception means for receiving designations of the information indicating a condition change [items] from the host apparatus, and wherein said storage means stores the information indicating a condition change [items] received by said additional reception means in units of types of host apparatuses.

41. (Amended) The apparatus according to claim [64] 39, wherein the types of host apparatuses include a supervisor who supervises a system including the host apparatus and said printing apparatus, and a normal user other than the supervisor.

43. (Twice Amended) The apparatus according to claim 64, wherein said determination means determines whether [the] contents of the change in condition acquired by said condition acquisition means correspond to the [item] information stored in the storage medium.

45. (Twice Amended) The method according to claim 65, wherein the storage step includes a step of storing the information indicating a condition change [items] in units of types of host apparatuses, the determination step includes a step of referring to the information indicating a condition change [items] stored in the storage step in units of types of host apparatuses, and the informing step includes a step of informing the host apparatus of the condition change in units of types of host apparatuses.

46. (Twice Amended) The method according to claim 65, further comprising an additional reception step of receiving designations of the information indicating a condition change [items] from the host apparatus, and wherein the storage step includes a step of storing the information indicating a condition

change [items] received in the additional reception step in units of types of host apparatuses.

47. (Amended) The method according to claim [65] 45, wherein the types of host apparatuses include a supervisor who supervises a system including the host apparatus and said printing apparatus, and a normal user other than the supervisor.

49. (Twice Amended) The method according to claim 65, wherein the determination step includes a step of determining whether contents of the change in condition correspond to the [items] information stored in the storage medium.

55. (Amended) A print controlling apparatus for controlling a printing unit to print data corresponding to a print job, comprising:

reception means for receiving from the printing unit a signal indicating that a condition of the printing unit has changed;

condition acquisition means for acquiring the condition of the printing unit in response to the signal;

determination means for determining based on the acquired condition whether the condition of the printing unit corresponds to a power-OFF notice; and

informing means for informing [a host computer] an external apparatus that a power supply is scheduled to be turned

off when said determination means determines that the condition of the printing unit corresponds to the power-OFF notice.

56. (Amended) A print controlling apparatus for controlling a printing unit to print data corresponding to a print job, comprising:

reception means for receiving from the printing unit a signal indicating that a condition of the printing unit has changed;

condition acquisition means for acquiring the condition of the printing unit in response to the signal;

determination means for determining based on the acquired condition whether the condition of the printing unit corresponds to a power-OFF notice;

storage means for storing information [of the] on a print job that has not been completed in a nonvolatile storage medium [if] when said determination means determines that the condition of the printing unit corresponds to the power-OFF notice; and

informing means for, when [the] a power supply is turned on, supplying information [of] on the print job that has not been completed to [a host] an external apparatus on the basis of the information stored in the nonvolatile storage medium.

57. (Amended) A print controlling method for controlling a printing unit to print data corresponding to a print job, comprising:

a reception step of receiving from the printing unit a signal indicating that a condition of the printing unit has changed;

a condition acquisition step of acquiring the condition of the printing unit in response to the signal;

a determination[s] step of determining based on the acquired condition whether the condition of the printing unit corresponds to a power-OFF notice; and

an informing step of informing [a host computer] an external apparatus that a power supply is scheduled to be turned off when said determination means determines that the condition of the printing unit corresponds to the power-OFF notice.

58. (Amended) A print controlling method for controlling a printing unit to print data corresponding to a print job, comprising:

a reception step of receiving from the printing unit a signal indicating that a condition of the printing unit has changed;

a condition acquisition step of acquiring the condition of the printing unit in response to the signal;

a determination step of determining based on the acquired condition whether the condition of the printing unit corresponds to a power-OFF notice;

a storage step of storing information [of the] on a print job that has not been completed in a nonvolatile storage medium [if] when said determination step determines that the condition of the printing unit corresponds to the power-OFF notice; and

an informing step of, when [the] a power supply is turned on, supplying information [of] on the print job that has not been completed to [a host] an external apparatus on the basis of the information stored in the nonvolatile storage medium.

59. (Amended) A computer readable storage medium that stores a program for controlling a printing unit to print data corresponding to a print job, said program comprising:

a code of a reception step of receiving from the printing unit a signal indicating that a condition of the print unit has changed;

a code of a condition acquisition step of acquiring the condition of the printing unit in response to the signal;

a code of a determination step of determining based on the acquired condition whether the condition of the printing unit corresponds to a power-OFF notice; and

a code of an informing step of informing [a host computer] an external apparatus that a power supply is scheduled

to be turned off when said determination step determines that the condition of the printing unit corresponds to the power-OFF notice.

60. (Amended) A computer readable storage medium that stores a program for controlling a printing unit to print data corresponding to a print job, said program comprising:

a code of a reception step of receiving from the printing unit a signal indicating that a condition of the print unit has changed;

a code of a condition acquisition step of acquiring the condition of the print unit in response to the signal;

a code of a determination step of determining based on the acquired condition whether the condition of the printing unit corresponds to a power-OFF notice;

a code of a storage step of storing information [of the] on a print job that has not been completed in a nonvolatile storage medium [if] when said determination step determines that the condition of the printing unit corresponds to the power-OFF notice;

a code of an informing step of, when [the] a power supply is turned on, supplying information [of] on the print job that has not been completed to [a host] an external apparatus on the basis of the information stored in the nonvolatile storage medium.

61. (Amended) A print controlling apparatus for controlling a printing unit to print data corresponding to a print job, comprising:

reception means for receiving from the printing unit a signal indicating that a condition of the printing unit has changed;

condition acquisition means for acquiring the condition of the printing unit in response to the signal;

determination means for determining based on the acquired condition whether a change in condition corresponds to a change in remaining paper quantity; and

informing means for informing [a host] an external apparatus of the remaining paper quantity when said determination [step] means determines that the change in the condition corresponds to a change in the remaining paper quantity.

62. (Amended) A print controlling method for controlling a printing unit to print data corresponding to a print job, comprising:

a reception step of receiving from the printing unit a signal indicating that a condition of the printing unit has changed;

a condition acquisition step of acquiring the condition of the printing unit in response to the signal;

a determination step of determining based on the acquired condition whether a change in condition corresponds to a change in remaining paper quantity; and

an informing step of informing [a host] an external apparatus of the remaining paper quantity when said determination step determines that the change in the condition corresponds to a change in the remaining paper quantity.

63. (Amended) A computer readable storage medium that stores a program for controlling a printing unit to print data corresponding to a print job received from [a host] an external apparatus, said program comprising:

a code of a reception step of receiving from the printing unit a signal indicating that a condition of the printing unit has changed;

a code of a condition acquisition step of acquiring the condition of the printing unit in response to the signal;

a code of a determination step of determining based on the acquired condition whether a change in condition corresponds to a change in remaining paper quantity; and

a code of an informing step of informing the [host] external apparatus of the remaining paper quantity when said determining means determines that the change in the condition corresponds to a change in the remaining paper quantity.

64. (Amended) A print controlling apparatus for controlling a printing unit to print data corresponding to a print job received from a host apparatus, comprising:

storage means for storing [an item of] information indicating a condition change designated [by] in a plurality of condition changes and a host apparatus in a storage medium;

reception means for receiving from the printing unit a signal indicating that a condition of the printing unit has changed;

determination means for determining, in response to the signal, whether the condition change [corresponding to the item] indicated by the information stored in the storage medium has occurred; and

informing means for informing [a] the host apparatus indicated by the information stored in the storage medium of the condition of the printing unit when said determination means determines that the condition change [corresponding to the item] indicated by the information stored in the storage medium has occurred.

65. (Amended) A print controlling method for controlling a printing unit to print data corresponding to a print job, comprising:

a storage step of storing [an item of] information indicating a condition change designated [by] in a plurality of condition changes and a host apparatus in a storage medium;

a reception step of receiving from the printing unit a signal indicating that a condition of the printing unit has changed;

a determination step of determining, in response to the signal, whether the condition change [corresponding to the item] indicated by the information stored in the storage medium has occurred; and

an informing step of informing the host apparatus indicated by the information stored in the storage medium of the condition of the printing unit when said determination step determines that the condition change [corresponding to the item] indicated by the information stored in the storage medium has occurred.

66. (Amended) A computer readable storage medium that stores a program for controlling a printing unit to print data corresponding to a print job, said program comprising:

a code of a storage step of storing [an item of] information indicating a condition change designated [by] in a plurality of condition changes and a host apparatus in a storage medium;

a code of a reception step of receiving from the printing unit a signal indicating that a condition of the printing unit has changed;

a code of a determination step of determining, in response to the signal, whether the condition change [corresponding to the item] indicated by the information stored in the storage medium has occurred; and

a code of an informing step of informing the host apparatus indicated by the information stored in the storage medium of the condition of the printing unit when said determination step determines that the condition change [corresponding to the item] indicated by the information stored in the storage medium has occurred.

67. (Amended) A computer program product loadable into an internal memory of a digital computer for controlling a printing unit to print data corresponding to a print job, comprising program code portions for performing the steps of:

receiving from the printing unit a signal indicating that a condition of the printing unit has changed;

acquiring the condition of the printing unit in response to the signal;

determining based on the acquired condition whether the condition of the printing unit corresponds to a power-OFF notice; and

informing [a host computer] an external apparatus that a power supply is scheduled to be turned off when it is determined that the condition of the printing unit corresponds to the power-OFF notice.

68. (Amended) A computer program product loadable into an internal memory of a digital computer for controlling a printing unit to print data corresponding to a print job, comprising program code portions for performing the steps of:

receiving from the printing unit a signal indicating that a condition of the printing unit has changed;

acquiring the condition of the printing unit in response to the signal;

determining based on the acquired condition whether the condition of the printing unit corresponds to a power-OFF notice;

storing information [of the] on a print job that has not been completed in a nonvolatile storage medium [if] when it is determined that the condition of the printing unit corresponds to the power-OFF notice; and

supplying information [of] on the print job that has not been completed to [a host] an external apparatus on the basis of the information stored in the nonvolatile storage medium, when [the] a power supply is turned on.

69. (Amended) A computer program product loadable into an internal memory of a digital computer for controlling a

printing unit to print data corresponding to a print job,
comprising program code portions for performing the steps of:

receiving from the printing unit a signal indicating
that a condition of the printing unit has changed;

acquiring the condition of the printing unit in
response to the signal;

determining based on the acquired condition whether a
change in condition corresponds to a change in remaining paper
quantity; and

informing [a host] an external apparatus of the
remaining paper quantity when it is determined that the change in
the condition corresponds to a change in the remaining paper
quantity.

70. (Amended) A computer program product loadable into
an internal memory of a digital computer for controlling a
printing unit to print data corresponding to a print job,
comprising program code portions for performing the steps of:

a storage step of storing [an item of] information
indicating a condition change designated [by] in a plurality of
condition changes and a host apparatus in a storage medium;

a reception step of receiving from the printing
unit a signal indicating that the condition of the printing unit
has changed;

a determination step of determining, in response to the
signal, whether the condition change [corresponding to the item]

indicated by the information stored in the storage medium has occurred; and

an informing step of informing [a] the host apparatus indicated by the information stored in the storage medium of the condition of the printing unit when said determination step determines that the condition change [corresponding to the item] indicated by the information stored in the storage medium has occurred.

72. (Amended) The apparatus according to claim 71, wherein the host apparatus is connected with the printing apparatus via a network.

73. (Amended) A method of controlling a printing apparatus for printing data corresponding to a print job, comprising the steps of:

controlling an electric power supply to continue to supply electric power for a predetermined period after a power switch is turned off; and

informing a host apparatus in the predetermined period after the power switch is turned off that the power supply is to be turned off.